

Amendment to the Claims

1. **(Previously Presented)** A method for use data transmission in a wireless communication system comprising:

assigning one of at least two radio configurations, the at least two radio configurations being established as a function of at least two orthogonal code sets arranged for coding of data transmitted in the wireless communication system, and the assigned radio configuration being ~~assigned as a function of selected to~~ achieve a higher data transmission rate determined by calculating the data transmission rate for at least one data burst based on a power level and Walsh code for each of the at least two radio configurations;

transmitting the at least one data burst using said assigned radio configuration.

2. **(Cancelled)** ~~The method of Claim 1, wherein calculating the data transmission rate comprises:~~

~~evaluating the power level for each radio configuration; and
evaluating the availability of Walsh codes for each radio configuration.~~

3. **(Currently Amended)** A method for use in wireless communication comprising:

assigning one of at least two radio configurations, the radio configuration being assigned as a function of a higher data transmission rate determined by calculating the data transmission rate for at least one data burst by evaluating the power level for each radio configuration and evaluating the availability of Walsh codes for each radio configuration;

transmitting the at least one data burst using said assigned radio configuration.

~~The method of Claim 2,~~ wherein the step of evaluating the power level for each radio configuration comprises:

evaluating the power level without the at least one data burst; and
evaluating the power level for the at least one data burst.

4. **(Original)** The method of Claim 3, wherein the evaluated power level for the at least one data burst comprises:

evaluating the power level at an onset of the at least one data burst.

5. **(Original)** The method of Claim 4, comprising

if the calculated data transmission rate is about equal for each radio configuration, comparing a channel power with a threshold.

6. **(Previously Presented)** The method of Claim 5, comprising:

if the channel power is at or below the threshold, assigning the one of the radio configurations with a higher of maximum number of traffic Walsh codes of said at least two radio configurations; and

if the channel power is above the threshold, computing a power utilization and Walsh code utilization for each radio configuration.

7. **(Original)** The method of Claim 6, wherein the step of computing a power utilization for each radio configuration comprises:

for each radio configuration, dividing the power in use during the at least one data burst by a maximum traffic transmission power.

8. **(Original)** The method of Claim 6, wherein the step of computing a Walsh code utilization for each radio configuration comprises:

for each radio configuration, dividing the Walsh codes in use during the at least one data burst by a maximum number of traffic Walsh codes.

9. **(Previously Presented)** The method of Claim 8, wherein the step of dividing the Walsh codes in use comprises:

considering Walsh code blocking between codes of different length in response to available Walsh code orthogonality.

10. (Currently Amended) The method of Claim 6, comprising:

assigning the radio configuration ~~supporting~~ having a ratio of power utilization to Walsh utilization closest to at least one of unity and a tunable value about unity.

11. (Previously Presented) The method of Claim 6, wherein the at least two radio configurations comprises at least one of Radio Configuration 3 (RC3) and Radio Configuration 4 (RC4).

12. (Withdrawn) A method of wireless communication comprising:

receiving at least one data burst using an assigned one of at least two radio configurations, the radio configuration assigned in response to a higher calculated data transmission rate determined by calculating the data transmission rate for the at least one data burst based on a power level and Walsh code for each of the at least two radio configurations.

13. (Withdrawn) The method of Claim 12, wherein the step of calculating the data transmission rate comprises:

evaluating the power level for each radio configuration; and
evaluating the availability of Walsh codes for each radio configuration.

14. (Withdrawn) The method of Claim 13, wherein the step of evaluating the power level for each radio configuration comprises:

evaluating the power level without the at least one data burst; and
evaluating the power level for the at least one data burst.

15. (Withdrawn) The method of Claim 14, wherein the evaluated power level for the at least one data burst comprises:

evaluating the power level at an onset of the at least one data burst.

- 16. (Withdrawn)** The method of Claim **15**, comprising
if the calculated data transmission rate is about equal for each radio configuration, comparing a channel power with a threshold.
- 17. (Withdrawn)** The method of Claim **16**, comprising:
if the channel power is at or below the threshold, assigning the one of the radio configurations with a higher of maximum number of traffic Walsh codes of at least two radio configurations; and
if the channel power is above the threshold, computing a power utilization and Walsh code utilization for each radio configuration.
- 18. (Withdrawn)** The method of Claim **17**, wherein the step of computing a power utilization for each radio configuration comprises:
for each radio configuration, dividing the power in use during the at least one data burst by a maximum traffic transmission power.
- 19. (Withdrawn)** The method of Claim **17**, wherein the step of computing a Walsh code utilization for each radio configuration comprises:
for each radio configuration, dividing the Walsh codes in use during the at least one data burst by a maximum number of traffic Walsh codes.
- 20. (Withdrawn)** The method of Claim **19**, wherein the step of dividing the Walsh codes in use comprises:
considering Walsh code blocking between codes of different length in response to available Walsh code orthogonality rules.
- 21. (Withdrawn)** The method of Claim **17**, comprising:
assigning the radio configuration supporting having a ratio of power utilization to Walsh utilization closest to at least one of unity and a tunable value about unity.

22. (Withdrawn) The method of Claim 17, wherein the at least two radio configurations comprises at least one of RC3 and RC4.